



CODE WORKS!

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SUMMER 2008

ATTENTION READERS!

In an attempt to reach more organizations and individuals involved in code inspections, we're asking for your help in getting the word out! If you know of an organization or individual that would benefit from the information posted in BCC's newsletter, please direct them to our website at www.michigan.gov/bcc. Then, click on the "Publications/Bulletins/Interpretations/Advisories" link for more information on how to subscribe to and receive an electronic notification of when each quarterly newsletter is posted.

STATE HOLIDAY OFFICES CLOSED:

September 1
November 4
November 11

WORDS FROM FORMER DIRECTOR HENRY GREEN

Since coming to the Bureau of Construction Codes (BCC) in 1977, I have had the privilege of participating in the most unique and dynamic program in Michigan. It has been my profound pleasure to work in the Bureau and bring about some of the positive changes in how we address the rigors of our built environment in Michigan.

As an inspector, I became familiar with the process of inspections and how contractors and inspectors must work together to assure that construction develops in a manner resulting in a safe structure. This gave me opportunities to learn more than ever that no one element of the construction process is more important than another. It brought about an appreciation for the application of building standards that helped me mix my experience as a designer and contractor into the entire construction process.

As the Chief of the Barrier Free Design Division, I learned that the application of accessibility standards improved the quality of life for everyone. The installation of ramps helps those who use wheelchairs and other mobility aids access services, employment and entertainment that otherwise would not have been as readily available to them. We now see including such items in our everyday environment has improved the quality of life for all persons. We also see how such advantages in construction of housing can transition from a youthful home to one that can grow into a home for our senior years.

In my role as chief building inspector, I had the opportunity to work on major construction projects from a management position and to oversee the operation from a more global point of view. This included the development of standards aimed at improving how we address some of the most critical issues in our building process. Working on these projects and in the development of standards provided me with an opportunity to review some of the most pressing issues facing the building community and our nation's citizens. Together working with industry, we addressed many emerging issues that have resulted in an improved built environment.

As Director of the BCC, I have experienced the responsibility of directing a program that has made significant improvements in how we develop codes, respond to building issues and face the challenges of a complex building process. It has brought about changes in how we, as code administrators, learn our craft and how construction codes embrace new materials and emerging technology. Also, it has brought about changes in how the building community engages the building process to deliver a product to their customers that provides a safe and secure environment that is sustainable and preserves our natural environment.

It has now come to a point in my career where I am moving to new opportunities and taking on new challenges. I want to thank the Michigan construction community for your assistance in achieving what I believe is the greatest program in the Country. Michigan is the best and is used as an example in many discussions on how to achieve the rewards of a safe and secure built environment. This could not have been achieved without the assistance of the great staff of the Bureau and without the support of an industry that focused on doing the right thing. Thank you for the wonderful memories.

BOILER DIVISION

AMENDMENTS TO THE BOILER LAW

**By Robert Aben, Chief
Boiler Division**

Recent amendments to the boiler law have resulted in a long awaited change as it no longer requires boiler licensing of individuals who install or repair boilers in a private residence or apartment building with less than 6 families. Rather, as explained below, individuals must carry a mechanical contractor's license to perform this work.

Since 1966, the boiler act has exempted from the requirements of law, boilers in private residences and apartment buildings with less than 6 families EXCEPT that individuals installing or repairing boilers in these locations had to be licensed under the boiler act. Effectively, what this meant was you did not pull permits or get inspections from the Boiler Division, but you did need to be licensed by the Boiler Division which made policing the licensing activity rather difficult.

With the change in law, by default, the licensing of individuals doing boiler installation or repair in these locations

falls to the State of Michigan Mechanical Division. Please refer to Section 338.977 Sec.7.(1) 1984 PA 192 which states, "1) Except as provided in subsection (3) and section 14, an individual, partnership, association, corporation, governmental subdivision, college, or university shall not perform installations, alterations, or servicing of work classifications under section 6(3), which are regulated by the state construction code act of 1972, 1972 PA 230, MCL 125.1501 to 125.1531, unless the individual, or an employee of the individual, partnership, association, corporation, governmental subdivision, college, or university has received a contractor's license from the department, which has not been revoked or suspended, and the license is either classified and limited as provided in section 6 or is annotated as provided in section 8, and the holder of the license has secured the appropriate permit from the enforcing agency charged with the responsibility of issuing permits."

Questions or concerns may be directed to the Boiler Division at (517) 241-9334 or the Mechanical Division at (517)241-9325.

BCC CONTACT INFORMATION

Telephone Numbers:

Administration (517) 241-9302
Office of Administrative Services (517) 335-2972
Office of Management Services (517) 241-9313
Boiler Division (517) 241-9334
Building Division (517) 241-9317
Electrical Division (517) 241-9320
Elevator Safety Division (517) 241-9337
Mechanical Division (517) 241-9325
Office of Local Government & Consumer Services (517) 241-9347
Office of Land Survey & Remonumentation (517) 241-6321
(includes State Boundary Commission)
Plan Review Division (517) 241-9328
Plumbing Division (517) 241-9330

Overnight packages for

Administration, Office of Administrative Services,
Office of Management Services, Building Division,
Electrical Division, Mechanical Division,
Office of Local Government and Consumer Services,
Plan Review Division, Plumbing Division

should be addressed to:

Michigan Department of Labor & Economic Growth
Bureau of Construction Codes
Attn: Division or person's name you are sending materials to
2501 Woodlake Circle
Okemos, MI 48864

Facsimile Numbers:

Administration & Office of Administrative Services (517) 241-9570
Office of Management Services & Plumbing Div. (517) 373-8547
Building, Electrical, Mechanical, Plan Review Div., OLGCS (517) 241-9308
Office of Land Survey & Remonumentation, Boiler & Elevator Safety Divisions (517) 241-6301

Mailing Addresses:

P.O. Box 30254 (Codes: general correspondence)
P.O. Box 30255 (Codes: permits, licenses, and other documents containing payment)
P.O. Box 30704 (Office of Land Survey & Remonumentation)
Lansing, Michigan 48909

Overnight packages for

Boiler Division, Elevator Safety Division,
Office of Land Survey and Remonumentation (including State Boundary Commission)

should be addressed to:

Michigan Department of Labor & Economic Growth
Bureau of Construction Codes
Attn: Division or person's name you are sending materials to
6546 Mercantile Way
Lansing, MI 48911

BUILDING DIVISION

2006 MICHIGAN RESIDENTIAL CODE – SIGNIFICANT CHANGES

By **Larry Lehman, Chief**
Building Division

The 2006 Michigan Residential Code (MRC) goes into effect August 1, 2008. Listed below are several significant 2006 MRC code changes. The list is not an inclusive inventory of all of the changes in the MRC, nor are the brief explanations intended to do more than provide general information on some of the changes.

ATTICS:

- All attic spaces served by a fixed stair shall have the minimum live loads (30 lbs.) designed as sleeping rooms.
- The table for minimum uniformly distributed live loads now includes a clear space dimension threshold for when storage could occur and a minimum live load requirement when storage loads do not apply, or for when only occasional access into small spaces occurs.
- When rafter collar ties are required, they must be in the upper third of the attic space.
- Unvented conditioned attic assemblies are allowed when there is no interior vapor retarder on the ceiling side; when air-impermeable insulation is applied in direct contact with the underside of the deck and the insulation is sufficient to maintain the temperature above 45 degrees F. All three conditions must be met.
- Attics, soffits, ridge vents and crawl spaces cannot be used to discharge air from an exhaust system. Air removed by every mechanical device must be discharged directly to the outside. Exhaust openings cannot be located within 2 feet of a ventilated soffit.
- Access path lengths to mechanical equipment in attics or under floors has been extended to 50 feet in attics and unlimited length for under floor spaces if the entire length of the passageway has a minimum height of 6 feet and a minimum width of 22 inches.
- Attic access openings shall be large enough to allow for removal of any mechanical equipment in the attic.

DEFINITIONS:

- Accessory structures have been redefined. The allowable height of not more than three stories has been reduced to not more than two stories and less than 3,000 sq. ft. Structures must be customarily accessory to and incidental

to the dwelling on the same lot.

- New definitions have also been added for foam backer board, foam plastic interior trim, gridded water distribution system, naturally durable wood, pre-cast concrete, thermal isolation, vehicular access doors, vinyl siding, retaining walls and water-resistive barriers.
- Climactic and geographic design criteria have been put back into the MRC.

EMERGENCY ESCAPE AND RESCUE:

- Emergency escape and rescue openings are now required in all basements regardless of whether or not they contain habitable space. There is an exception for a basement that is a mechanical equipment room with less than 200 square feet. If there is a bedroom(s) in the basement, openings are not required in the adjoining areas of the basement provided the bedroom door is not lockable. Emergency escape and rescue openings continue to be required in all bedrooms.
- Emergency escape and rescue openings must open directly to a public way, yard or a court to a public way. They can be located under decks and porches when the egress path has a minimum height of at least 36 inches.
- Any grills, bars, screens or covers over emergency and rescue openings shall be operational without any special knowledge and without having to use a key or other tools.

EXTERIOR WALLS AND FIRE SEPARATION:

- Exterior walls are now above-grade walls that define the exterior boundaries of a building, not above-grade walls that enclose conditioned space.
- Exterior walls must have a minimum one-hour fire-resistance where the fire separation distance is less than five feet.
- Openings are not allowed in exterior walls with a minimum fire separation distance of less than three feet.
- Openings on exterior walls with a minimum fire separation distance of three feet are limited to a maximum of 25 percent of the wall area.
- Openings on exterior walls with a minimum fire separation distance of five feet or greater are unlimited.

BUILDING DIVISION (CON'T)

- Detached garages less than three feet from a dwelling must be protected with at least one-half inch gypsum. 20-minute fire-rated doors, or doors constructed of a minimum of 1 3/8 inch solid wood or steel will be permitted. No other openings, including windows will be permitted. These requirements do not apply to walls perpendicular to the dwelling unit wall.
- Two-family dwellings may have a minimum ceiling membrane of 5/8-inch type X gypsum board with an attic draftstop separating the two dwellings at the line of the 1-hour separation wall required in R 502.12.1.
- Exterior wall assemblies shall be designed and constructed to prevent the infiltration of water, where the assembly is not tested as such, the assembly must drain water that enters the cavity to the exterior.
- Girder and header span table for exterior walls now contains a 70 lb. snow load column.
- There are new alternative bracing methods for wall panels adjacent to a door and added another alternative method for continuous structural panel sheathing.
- Where joists are perpendicular to the braced wall lines above, blocking shall be provided over and in line with the braced wall panels.

FOUNDATIONS:

- Freestanding light frame construction accessory structures with an area of 600 square feet or less are now exempt from frost protection requirements.
- Concrete and masonry foundation walls that retain earth and enclose interior spaces and floors below grade shall be dampproofed. In areas where a high water table or other severe soil/water conditions are known to exist, these walls shall be waterproofed.
- Unvented crawl spaces are allowed where there is a vapor retarder and either a continuously operated mechanical exhaust or a conditioned air supply or a plenum meeting the requirements of M1601.4 in the mechanical section of the MRC.
- Foundations and support for outdoor mechanical systems shall be raised at least three inches above the finished grade.

HAZARDOUS LOCATIONS AND HUMAN IMPACT LOADS:

- Safety glazing is not required for a stairway or landing when the glazing is at least 36 inches above the walking surface.
- Safety glazing is not required where glass block panels are used.
- Polished wired glass must now be tested in accordance with CPSC 16 CFR Part 1201, not ANSI Z97.1

INSPECTIONS:

- Frame and masonry inspections will be done after installation of base course flashing, water-resistive barriers and again after the installation of all the masonry.
- Reinforced masonry and insulated concrete forms (ICF) wall systems are required to be inspected after electrical, mechanical and plumbing systems have been placed in the walls but before the placement of grout or concrete.

INTERIOR WALLS:

- When drilling and notching more than 50% of the top plate only one 1 1/2 inch metal tie is required and that tie should be on the notched side of the wall.
- Joints in top plates where two plates are used do not need to occur over studs.
- The diameter and length of fasteners has been inserted into the fastener schedule table.
- The alternative attachments table contains revised fastener sizes and amounts.
- Protection of gas piping from driven nails has been increased from one inch to one and a half inches from the nearest edge of the framing member.

SCOPE:

- The MRC now applies to structures three stories above grade. Homes with three stories and a basement can be constructed under the MRC.

SMOKE ALARMS:

- New language has been added to make it clear that work on the exterior of a dwelling, including reroofing, siding, replacement windows or doors or the addition of a porch or a deck does not require the installation of smoke alarms.
- Smoke alarms are no longer required to be audible in bedrooms over background noise since smoke alarms are required in each bedroom.

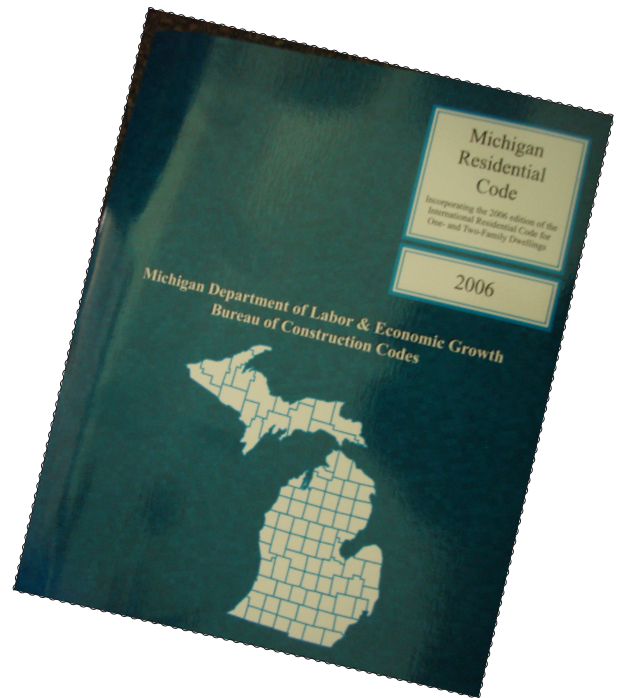
BUILDING DIVISION (CON'T)

- All smoke alarms shall be listed in accordance with UL 217, installed per the code and NFPA 72.
- Exterior window systems shall be installed and flashed in accordance with the manufacturer's installation requirements.

STAIRS, LANDINGS AND RAMPS:

- Exterior stairs must have a light switch controlled from the interior. Interior stairs with six or more risers must have a light switch at each floor level.
- There can be a single step down landing at the primary exterior door. Screen and storm doors may swing over stairs, steps or landings at these doors.
- A maximum of two risers will be permitted at all other exterior doors except the required exit door. Screen and storm doors may swing over the stairs. A two percent slope is permitted on landings.
- Landings at garage stairways are to be treated the same as interior basement stairs.
- The maximum allowable ramp slope has been changed to one unit vertical in twelve units horizontal (1-12). A maximum ramp slope of one unit vertical in eight units horizontal (1-8) will be permitted if a less steep slope is technically infeasible.
- Approved corrosion-resistant flashing must be applied shingle fashion and has to extend to the surface of the exterior wall finish or to the water-resistant barrier for drainage.

Questions may be directed to the Building Division at (517) 241-9317.



WINDOWS:

- Operable exterior windows more than 72 inches above exterior finished grade must have a minimum window sill height of 24 inches. There are two exceptions for window guard protection.

PLUMBING DIVISION

TEMPERED WATER AT DESIGNATED FIXTURES

**By Robert Konyndyk, Chief
Plumbing Division**

Section 607.1, Rule 408.30735 clarifies where hot and tempered water shall be supplied. Tempered water shall be supplied to all bathing and hand washing facilities identified in Section (2) (a) through (h). This includes accessible (barrier free) lavatories. This requirement mandates the fixture shall be supplied individually by an ASSE 1070 device. Each fixture required to be protected shall have its own ASSE 1070 device. Further, the device shall limit the tempered water to a maximum of 110 degrees Fahrenheit. These ASSE 1070 devices are

designed to protect users from burns/scalds; however, they do not protect against thermo shock.

We are requesting your assistance in updating our INSPECTOR ASSOCIATION CONTACTS. If you are the president or secretary/treasurer for your association, please provide your contact information to the Plumbing Division.

Questions may be directed to Robert Konyndyk, Plumbing Division, (517) 241-9330.

ELEVATOR SAFETY DIVISION

INCLINED & PRIVATE RESIDENCE INCLINED ELEVATORS / BUILDING PERMIT REQUIREMENTS

By Cal Rogler, Chief
Elevator Safety Division

The Elevator Safety Division has been asked to provide the following information regarding Inclined Elevators and Private Residence Inclined Elevators. Inclined elevators and private residence inclined elevators are usually used for access up or down hills to reach beach areas, boat docking facilities, restaurants, hotels, and other areas where the installation of a regular vertical elevator is not feasible.

Both of these devices are inclined elevators. However, these two types of elevating devices have differing requirements, and as such, have limitations on where they are permitted to be installed. A Private Residence Inclined Elevator may only be installed at a single family private residence. At any other location, the device required to be used would be an Inclined Elevator. An Inclined elevator has been designed with a greater level of safety in mind, as the device is used by more than a single family.

More and more homeowners are purchasing Private Residence Inclined Elevators. These elevating devices must comply with the Michigan Building Code (MBC) and the current Michigan Elevator Laws and Rules. The national safety standard currently used for compliance is the American Society of Mechanical Engineers (ASME) A17.1-2004, Safety Code for Elevators and Escalators along with the Michigan Elevator Rules. There should be a Code Data Plate on the elevator equipment which indicates the edition of the A17.1 Standard to which it was built.

Every Inclined Elevator or Private Residence Inclined Elevator must be installed to the requirements of the Michigan

Elevator Rules and the MBC. Before an installation may begin, a State of Michigan licensed elevator contractor must obtain an approved Elevator Installation Permit from the Elevator Safety Division. As part of the permitting process, before the Elevator Installation Permit will be issued to the elevator contractor, the division must receive specific information from the local building official along with a copy of the local building permit for the guide rail support structure, foundations, and landing platforms.

A copy of the approved permit shall be posted on the jobsite during the installation. The installation must be performed by a licensed elevator journey person, working for the elevator contractor that obtained the installation permit.

After installation and before the device may be used, it must be inspected by and tested in the presence of a General Elevator Inspector working for the Elevator Safety Division. The device must receive an approval from the elevator inspector prior to being placed into service and used by the owner.

If you are considering buying an Inclined Elevator or Private Residence Inclined Elevator you should carefully research the company before dealing with them. Do not be afraid to ask to see their elevator contractor and/or elevator journey person license to assure they have the proper license to install the device. This approach could save you considerable expense in the long run.

If you have questions or concerns with regards to the installation of an Inclined Elevator or a Private Residence Inclined Elevator, please call the Elevator Safety Division at (517) 241-9337.

BOARD AND COMMISSION MEETINGS

<u>Meeting</u>	<u>Date</u>	<u>Time</u>	<u>Location</u>
Barrier Free Design Board	Sept 19, Nov 14	9:30 am	Okemos – Conf Room 3
Board of Boiler Rules	Sept 16	9:30 am	Okemos – Conf Room 3
Construction Code Commission	Sept 10, Nov 5	9:30 am	Okemos – Conf Room 3
Electrical Administrative Board	Oct 3	9:30 am	Okemos – Conf Room 3
Elevator Safety Board	Aug 22, Nov 7	9:30 am	Okemos – Conf Room 3
Manufactured Housing Commission	Oct 15	10:00 am	Okemos – Conf Room 3
Board of Mechanical Rules	Sept 17, Nov 12	9:00 am	Okemos – Conf Room 3
State Boundary Commission	Sept 18, Oct 16, Nov 13	1:30 pm	Okemos – Conf Room 3
State Plumbing Board	Sept 23, Oct 22	10:00 am	Okemos – Conf Room 1

MAPPING WITH MICHIGAN'S STATE PLANE COORDINATE SYSTEM (MCS-83)

One can picture unrolling a rolled up map or a paper cone shaped like a party hat to a flat surface. Using this idea, a point located on a scaled model of the earth in the shape of a cone or a cylinder can be projected onto a flat map surface. Using a mathematical model of the earth in the shape of a cone or cylinder and a known mathematical factor (known as a grid scale factor), allows for conversion between measured dimensions on the ground and respective dimensions on a map (grid dimensions).

Although other states use a cylinder shaped model, the MCS requires a specific cone shaped model which generally

- For the purpose of describing the location of a survey station or land boundary corner in the state of Michigan, it shall be considered a complete, legal, and satisfactory

OFFICE OF LAND SURVEY AND REMONUMENTATION CON'T

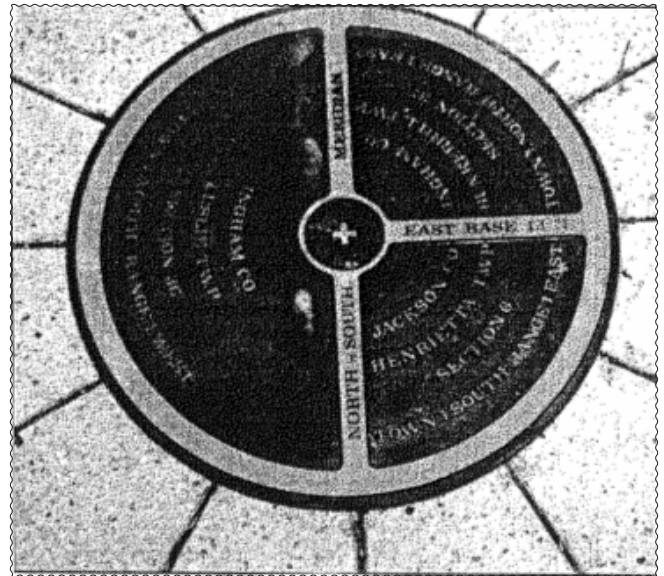
description of that location to give the position of the survey station or land boundary corner by the Michigan coordinate system of 1983.

- The Michigan coordinate system of 1983 shall be the sole system used after December 31, 1989.

Understanding the usefulness and value of having one common system for relating property corners to each other, Michigan's Remonumentation Program provides for the establishment and reporting of MCS-83 coordinates on all government corners remarked under the program.

The establishment of MCS-83 coordinates on the government corners will allow for efficient relocation of the corner if ever needed. MCS-83 coordinates also provide for a base map for most any mapping projects including geographic information systems (GIS), and land information systems (LIS).

Questions can be directed to OLS&R at (517) 241-6321.



ELECTRICAL DIVISION

2009 APPRENTICE RENEWALS, CODE UPDATE CLASS, & 2006 MRC

By **Dan O'Donnell, Chief**
Electrical Division

The 2009 renewal applications have been mailed to all electrical apprentices currently registered with the Bureau of Construction Codes. Pursuant to the Electrical Administrative Act, 1956 PA 217, all apprentice electricians must maintain a current apprentice registration card to be eligible to work on a jobsite in the State of Michigan. Effective September 1, 2008, any hours accumulated while an apprentice registration is expired will not be credited towards the 8000 hours needed to qualify for the journeyman electrician examination. 1956 PA 217 also requires direct personal supervision of all apprentice electricians from either a master or journeyman electrician any time an apprentice electrician is on a jobsite.

The 2009 electrical master and journeyman license renewals along with the renewals for fire alarm specialty technicians and

sign specialist are expected to be sent out by mid-September 2008. The required 2005 code update class must be in our computer system prior to the issuance of a 2009 license. By completing your code update class prior to license renewals being mailed out, will help assure a much smoother renewal process.

Lastly, the 2006 Michigan Residential Code (MRC) went into effect August 1, 2008. The Bureau has a limited number of 2006 MRC books available at our Okemos office for walk-in customers. Books may also be ordered through the International Code Council (ICC). Ordering information is available on the bureau's website at www.michigan.gov/bcc.

Questions can be directed to the Electrical Division at (517) 241-9320.

OFFICE OF LOCAL GOVERNMENT AND CONSUMER SERVICES

ADMINISTRATIVE CASES

By Scott Fisher, Director

Office of Local Government & Consumer Services (OLGCS)

As most of you know, the Bureau of Construction Codes investigates hundreds of complaints each year against individuals and companies licensed in the construction and manufactured housing industries. On occasion, the findings of an investigation will result in a formal licensing action against one or more licensees.

Cases that reach a level of formal action are presented to the appropriate board or commission at the final stage. It is at that point the recommended penalties against the licensee are approved or amended. Generally, those individuals who are not a party to the complaint, the investigation or the adjudication have very little or no knowledge of the events.

However, in April of 2007, the bureau began posting a summary of Administrative Cases on its website. The initial

posting included eight licensing actions in the construction industry and one case in the manufactured housing industry. All of which were settled between October 1, 2006, and April of 2007.

Since that time, the information has been updated to include additional cases concluded during the 2007 fiscal year. Staff is currently preparing information to be posted relating to administrative cases concluded during the 2008 fiscal year.

To view information relating to the Bureau's Administrative Cases, visit BCC's website at www.michigan.gov/bcc, click Divisions, then Office of Local Government & Consumer Services. Go to complaints and click Disciplinary Action Report.

If you have any questions, please contact OLGCS at (517) 241-9347.

MANUFACTURED HOUSING COMMISSION

By Kevin DeGroat, Regulation Specialist

Office of Local Government & Consumer Services

The Manufactured Housing Commission sanctioned the licenses of a manufactured housing community and two manufactured home retailers at its April 16, 2008, meeting. The Commission penalized the community operator for a variety of offenses. The most serious of which include operating without a license; failing to comply with state Environmental Quality sanitation and maintenance regulations; uncorrected electrical and spacing violations; and violating a previous Consent Agreement regarding public health and road conditions. The community's license is now revoked.

Commissioners fined and imposed possible license revocation on two retailers that failed to deliver home titles and comply with the conditions of previous Orders. The

Final Orders required the offenders to prove correction of outstanding violations--subject to additional fines, license revocation and restitution for subsequent infractions. These licenses are revoked, absent evidence of compliance.

All three complaints were presented to the Commission for final action after the licensees failed to answer or comply with previous Orders.

Details regarding this action may be viewed on the bureau's website from [OLGCS's Complaint link](#).

Questions about these cases may be directed to the Office of Local Government and Consumer Services at (517) 241-9347.

PLUMBING DIVISION

PLUMBING EXAMINATION CHANGE

By Robert Konyndyk, Chief

Plumbing Division

The Plumbing Division has implemented an improvement in the journey plumber's examination process which began at the past examination in the Upper Peninsula and continues for all Lansing examinations. Journey applicants are now required to provide all materials for the practical portion which involves the project. These materials include copper tubing, fittings, solder and other products. The bureau's website contains

details on the required materials and applicants will be provided written notice for the next two examinations. This will enable the board and division to make updated changes in the header configuration at a later date. Another significant change is the examination will be based upon the 2006 edition of the Michigan Plumbing Code.

Questions may be directed to the Plumbing Division at (517) 241-9330.

MECHANICAL DIVISION

THE RIGHT WATER HEATER FOR THE RIGHT USE

**By Tennison Barry, Chief
Mechanical Division**

It has been brought to the division's attention that water heaters are being improperly used. I received a call from a major manufacturer of water heaters informing me they have become aware that water heaters are being sold and installed improperly.

When a water heater is being replaced in a manufactured home, it must be labeled for such use. There are two different styles - One style receives its combustion air from underneath the heater and must be replaced with a like heater; the other receives its combustion air through the outer shell and must be

replaced with a like heater.

Water heaters that have four openings are not intended to be used as if it is a boiler. Although they say they can be used for space heating, they cannot be used instead of a boiler. There are several water heaters that are state approved to be used that way and have a heat exchanger inside.

Before installing any water heater, you must make sure you are installing the heater properly.

Questions may be directed to Tennison Barry at (517) 241-9325.

PLAN REVIEW DIVISION

EXTERIOR INCLINED ELEVATOR SUPPORT REVIEW

**By Irvin Poke, Chief
Plan Review Division**

The Michigan Building Code (MBC) sets forth the requirements for construction permits, plan review, and the technical provisions for all buildings and structures. The scoping language in MBC, Section 101.2 encompasses the construction of the guide-rail support structure, foundations and landing platforms for inclined elevators. The Michigan Elevator Rules requires that elevator supporting construction must comply with the MBC. Therefore, documentation for the guide-rail supports and the landing platforms for an inclined elevator shall be provided as defined herein. This documentation shall be provided for each installation and address the specifics of that site. The elevator permit, in accordance with 1967 PA 227, covers the guide-rail and car only. All other necessary construction will require the necessary permits as prescribed by 1972 PA 230 and the work must be performed by personnel with the appropriate license. Since the Michigan Residential Code does not have construction requirements for the type of supports and foundations necessary for the inclined elevator guide-rail supports, the MBC must be used for the construction requirements even when such elevators are on property occupied by a one or two family dwelling or townhouse complex.

A building permit in accordance with MBC, Section 105 will be required for the guide-rail supports, foundation system and the landing platforms. This permit will be issued by the local enforcing agency where the property is located. The construction document requirements are established in MBC, Section 106 and professional design services in accordance with 1980 PA 299 are required. The construction documents must be prepared under the responsible charge of a professional

engineer or architect because this is not one and two family dwelling construction.

It is critical that a site plan establishing the property lines and topography is provided. This is to assure that the elevator, landing platforms and guide-rails are on the property it serves and the actual slope of the property is considered in the foundation design. Structural requirements shall be in accordance with MBC, Chapter 16. The design shall consider the load combination prescribed in MBC, Section 1605. There shall be a special inspection program in accordance with MBC Chapter 17. Specifically, MBC, Section 1708.4 requires the presence of a special inspector when piles are installed and tested. It is the responsibility of the design professional to develop the special inspection program.

The foundation system shall comply with the applicable provisions of MBC, Chapter 18. A soils investigation shall be conducted and a report documenting the soils and recommendations for the foundation design shall be presented in accordance with MBC, Section 1802. The foundation system shall be designed and installed to prevent frost heave. When the construction documents demonstrate compliance with the requirements for materials and construction methods as applicable in the MBC, the building permit can be issued. The Bureau of Construction Codes' Elevator Safety Division will not issue the elevator permit until satisfactory evidence of compliance is received. The certificate of use for the elevator will not be issued until the special inspection report verifying compliance with the MBC is submitted.

Questions may be directed to the Plan Review Division at (517) 241-9328.

BCC ONLINE SERVICES

[Online License Search](#)
[Disciplinary Action Report](#)
[Easy Access to Permit & License Verification](#)
[Statewide Search for Subdivision Plats](#)
[Statewide Search for Remonumentation Data](#)
[County Remonumentation Data Entry](#)
[Building System Approval Reports](#)
[Online Code Training Series](#)

BCC QUICK LINKS

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[Online License Renewals](#)
[Codes & Standards Order Form](#)
[Statewide Jurisdiction List](#)
[Local School Construction Enforcement List](#)
[Product Approvals](#)

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[State Job Postings](#)

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Beth Hunter Aben

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LICENSE EXAMINATION DATES

<u>Examination</u>	<u>Date</u>	<u>Location</u>	<u>Deadline</u>
Boiler Installer and Repairer	Sept 3, 4	Okemos	Aug 8
Boiler National Board	Sept 3, 4	Okemos	Aug 8
Electrical/Fire Alarm/Sign Contractor	Sept 11 Sept 25 Nov 19	Okemos Escanaba Okemos	Aug 13 Aug 28 Oct 20
Fire Alarm Spec. Tech./Sign Spec.	Nov 18	Okemos	Oct 21
Electrician - Journeyman	Sept 24 Oct 20, 21, 22	Escanaba Okemos	Aug 27 Sept 22
Electrician - Master	Sept 25 Oct 23	Escanaba Okemos	Aug 28 Sept 25
Elevator - Contractor/Cert. of Comp.	Aug 22 Nov 7	Okemos Okemos	Aug 1 Oct 17
Elevator Journeyman	Sept 9 Nov 25	Okemos Okemos	Aug 19 Nov 4
Mechanical Contractor	Sept 23 Dec 16	Lansing Lansing	Aug 25 Nov 14
Plumbing - Contractor	Sept 17 Dec 10	East Lansing East Lansing	
Plumbing - Master and Journey	Sept 24 Dec 17	East Lansing East Lansing	

Dates and times are subject to change. Visit the BCC website for updates.

PROVIDING FOR
MICHIGAN'S SAFETY
IN THE BUILT ENVIRONMENT

DLEG is an equal opportunity employer/program. Auxiliary aids, services and other reasonable accommodations are available upon request to individuals with disabilities.